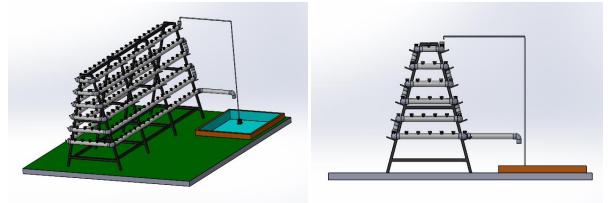
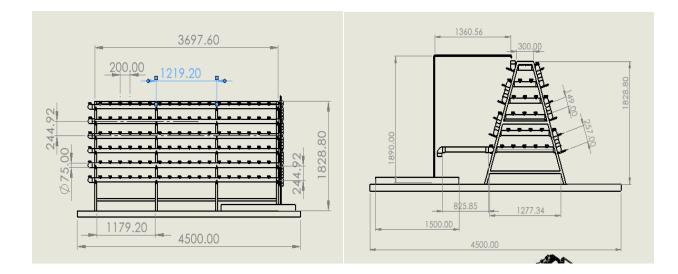
Nutrient Film Technique (NFT) Hydroponics.

Drawing / Sketch



Drawing /Measurements:-



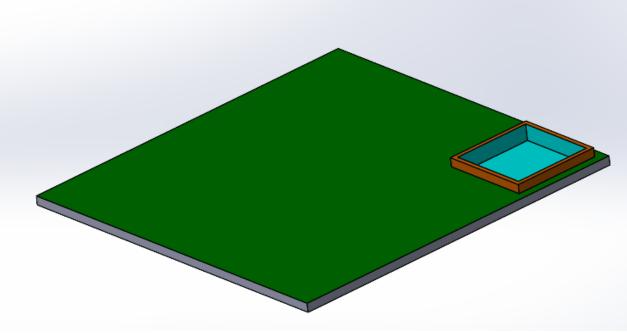
Bill of Materials

SR. NO.	MATERIAL	UNIT	QTY.	COST
1.	Square Tube (A= 40 B= 40 T= 3 MM / Length =140 ft.)	Nos.	7	4,200
2.	Round Rebar (Diameter 16 mm)	Kg 8	2	520
3.	PVC Pipe (Diameter 75 mm / Length 10 FT)	Ft	17	8,670
4.	PVC Elbow (Diameter 75 mm)	NOS.	25	1,500
5.	Net pot (Diameter 50 mm Height 50 mm)	NOS.	234	1,638
6.	Submersible Pump – Tillu (55 watts)	Nos.	1	750
7.	Dripper Pipe (Diameter 16 mm / Length 10 ft.)	Ft 10	1	100

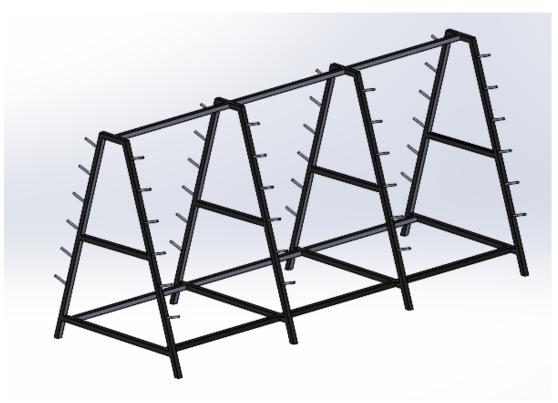
8.	Plastic Elbow (Diameter 16 mm)	Nos.	2	50
9.	Paint (2 liters)	Liter	2	750
10	Water tank (500 liters) (w=1000mm x L=1000mm x	Nos	1	2250
	H=500)			
11				850
	On off motor timer (230 volt and 30 amp)			

Description of Material

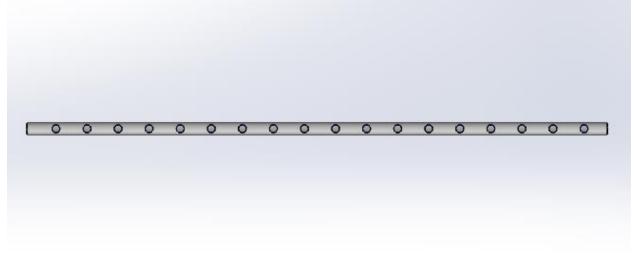
- GROUND BASE:-
 - Assembly: Clear the surface below and make it flat. The water level at the ends on the boundary should be 0.
 - Dimensions: W= 15ft x L=15 ft
 - Requirements: 500 L water tanks should be dug into the ground with dimensions = 1000 x 1000 x 500 mm



- NFT Hydroponic Stand:-
 - Make four "A" shaped frames Dimension: 6ft x 4.8 FT
 - Connect the frames at a distance of 4 ft from each other.
 - To hold the pipes, weld twelve, 16mm bars of length 100 mm onto each side of the frame
 - Paint the structure.

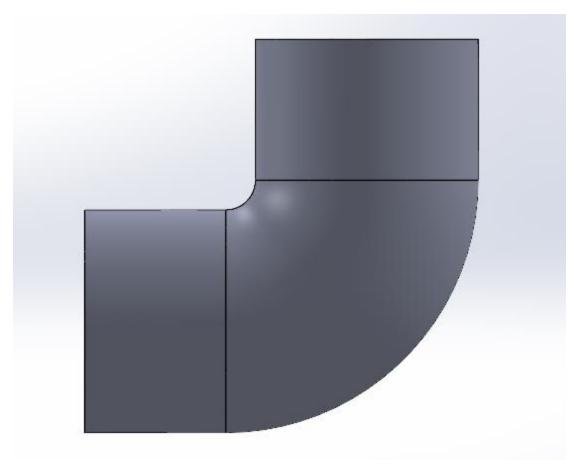


- PVC Pipe:-
- A :-
 - Cut out 17, 75mm pipes of length 10ft.
 - \circ $\,$ On the top side of the pipe, make 18, 50mm holes at a distance of 200mm $\,$



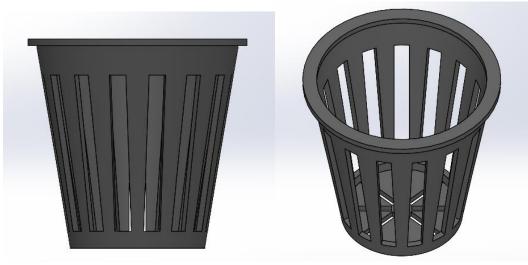
B:-

- PVC Elbow:-
 - \circ $\,$ To create a flow of water by connecting the pipes, 25 PVC elbows of 75mm are required.



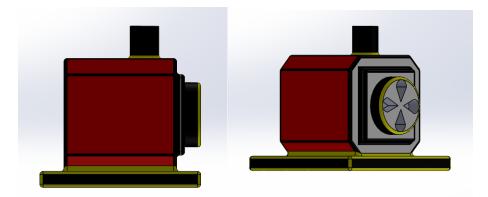


- Net Pot:-
 - To hold the plant in place and allow its root to get nutrients through water, a net pot of 50mm is used.
 - These pots are inserted into the PVC pipes.



- A submersible pump (tillu) :-
 - \circ $\;$ Assembly: The pump needs to be installed at the bottom of the ground tank.
 - The pump will supply water to the complete hydroponic system
 - Specification: 220V, 55 watt

0

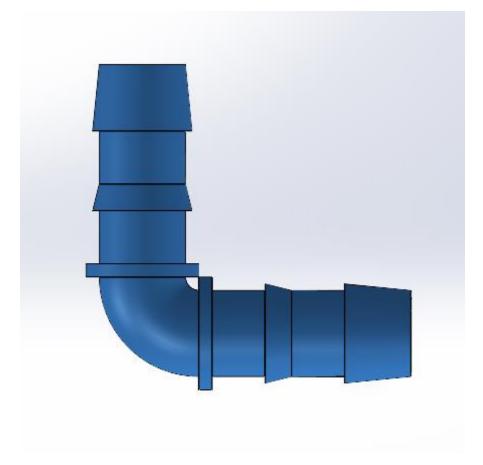


- Dripper Pipe :-
 - $\circ~$ A 10ft 16mm black colored dripper pipe is required
 - Connect the pipe to the submersible motor to enable the flow of water through the complete system.

0



- Plastic Elbow :-
 - \circ $\;$ This is used as a connector to the dripper pipe.



Fabrication

- Material processing
- Welding fabrication
- Painting
- Plumbing
- Electrical supply



Installation

• After the system is completely fabricated by following the steps mentioned above. It needs to be installed on the ground base and the required pipe fittings need to be done. On checking the appropriate flow of water in the system plant the saplings in the net pot and start the system.





